



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Bernd Riedl et al.

Serial No.: 10/042,226

Group Art Unit: 1614

Filed: January 11, 2002

Examiner: Dwayne C. Jones

For: ω -CARBOXYARYL SUBSTITUTED DIPHENYL UREAS AS RAF KINASE INHIBITORS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Mail Stop: RCE

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

Timing and Fees

- ☒ Under 37 C.F.R. § 1.97(b), no fee or statement is required for filing this information disclosure statement is filed:
- ☐ within three months of the filing date of a national application other than a CPA under § 1.53(d);
 - ☐ within three months of the actual filing date of the national phase of a PCT application; OR
 - ☒ before the mailing of a first substantive office action (including after filing of an RCE).
- ☐ Under 37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods specified in 37 C.F.R. § 1.97(b), but before the mailing date of:
- a final rejection under 37 C.F.R. 1.113;
 - termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); OR
 - a notice of allowance under 37 C.F.R. § 1.311; and

is accompanied by:

- ☐ the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR
 - ☐ a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p).
- ☐ Under 37 C.F.R. § 1.97(d), this information disclosure statement is filed after the mailing date of the following actions which have not been withdrawn:
- ☐ a final action under 37 C.F.R. § 1.113;
 - ☐ termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2);
 - ☐ OR a notice of allowance under 37 C.F.R. § 1.311;

AND is filed on or before payment of the issue fee; AND is accompanied by:

the statement as specified in 37 C.F.R. § 1.97(e) as set forth below, and the fee of \$180.00 under 37 C.F.R. § 1.17(p).

Statements Under 37 C.F.R. 1.97(e)

- ☐ Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned attorney after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing date of the information disclosure statement.

Cited Materials

- ☐ Copies of materials listed but not attached were cited in benefit (35 U.S.C. § 120) ancestor application Serial No. _____, on Form 892 by the Examiner and/or Form 1449 by the applicant; see 37 C.F.R. § 1.98(d).
- ☐ Copies of materials listed but not attached were cited in an international search report dated _____.
- ☐ Not required by 37 CFR § 1.98.
- ☒ Copies of the materials listed are attached.

Non-English Language References

☐ An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).

☐ A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:

X = document of particular relevance when it is taken alone

Y = document of particular relevance when it is combined with another such document

A = document defining the general state of the art

O = non-written disclosure

P = intercalated document

T = document cited to understand the theory or principle underlying the invention

E = patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date

D = cited in the application

L = cited for another reason

& = publication of member of same patent family

☐ Translation of other relevant information on foreign search report

[insert necessary translation here]

Other Information

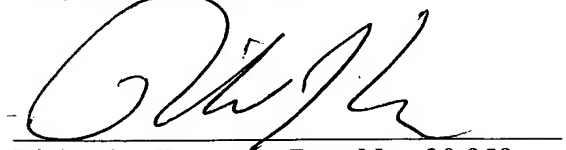
Payment of Fees Due (If Any):

☐ A check for \$_____ covering the fee identified above is attached.

☐ Please charge to Deposit Account No. 13-3402 \$_____ for the fee identified above.

☒ The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. J. Traverso', written over a horizontal line.

Richard J. Traverso, Reg. No. 30,959
Attorney for Applicants

MILLEN, WHITE, ZELANO
& BRANIGAN, P.C.
Arlington Courthouse Plaza 1
2200 Clarendon Blvd. Suite 1400
Arlington, Virginia 22201
Telephone: (703) 243-6333
Facsimile: (703) 243-6410

Attorney Docket No.: BAYER-0024-A

Date: June 14, 2006

RJT/jmj

Please type a plus sign (+) inside this box → ☐



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 8

Complete if Known

Application Number	10/042,226
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1614
Examiner Name	Dwayne C. Jones
Attorney Docket Number	BAYER-0024-A

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		4,546,191				
		5,559,137				
		6,380,218				
		3,284,433				
		5,510,094				
		6,310,068				
		6,525,046				
		6,500,863				

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
		Office ³	Num- ber ⁴	Kind Code ⁵ (if known)				
		EP	0690344					
		WO	02/092576					
		WO	02/062763	A2	Bayer Corp.	8-15-2002		
		WO	02/083628	A1	Boehringer Ingelheim Pharmaceuticals Inc.	10-24-2002		
		WO	02/085857	A2	Bayer Corp.	10-31-2002		
		WO	02/085859	A1	Bayer Corp.	10-31-2002		
		WO	97/09973		The Regents Of The University Of California	3-20-1997		
		WO	98/20868					
		WO	98/45268					
		WO	99/28305					
		WO	02/14311					
		WO	00/56331					
		WO	03/099771					
		EP	0709225	B1				

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 8

Complete if Known

Application Number	10/042,226
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1614
Examiner Name	Dwayne C. Jones
Attorney Docket Number	BAYER-0024-A

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Blanco, "p38 MAPK signaling cascades: ancient roles and new functions," Bioassays, 22:637-645, 2000	
		Dumas, J. "Protein Kinase Inhibitors from the urea class," Curr. Opin. In Drug Discovery and Dev., 5:718-727, 2002	
		Hotte et al., "Bay 43-9006: Early clinical data in patients with advanced solid malignancies," Current Pharmaceutical Design, 8:2249-2253, 2002	
		Kubo et al. "Synthesis and structure-activity relationship of quinazoline-urea derivatives as novel orally active VEGF receptor tyrosine kinase selective inhibitors," Proceedings of the American Association of Cancer Res. 43:182, 2002	
		Madwed et al., "Pharmacological Evaluation of BIRB 796, a selective inhibitor of P38 MAP kinase (MAPK), in animal models of endotoxic shock, inflammation and arthritis," Inflammation Res., 50:S184, 2001	
		Regan et al., "Pyrazole urea-based inhibitors of P38 MAP kinase: from lead compound to clinical candidate," J. Med. Chem. 45:2994-3008, 2002	
		Proceedings of the American Association for Cancer Research - Volume 42 - March 2001 - #4954 Anti-Tumor Efficacy of the Orally Active Raf Kinase Inhibitor BAY 43-9006 in Human Tumor Xenograft Models. Christopher A. Carter et al., Bayer Corporation.	
		XP-001145779 "Antitumor Activity of a C-raf Antisense Oligonucleotide in Combination with Standard Chemotherapeutic Agents against Various Human Tumors Transplanted Subcutaneously into Nude Mice", Thomas Geiger et al., Vol. 3, 1179-1185, July 1997.	
		XP-002232130, "A Phase I Trial of H-ras Antisense Oligonucleotide ISIS 2503 Administered as a Continuous Intravenous Infusion in Patients with Advanced Carcinoma", C. Casey Cunningham et al., 2001 American Cancer Society, Volume 92, Number 5, pages 1265-1271.	
		Riedl et al., Potent Raf Kinase Inhibitors from the Diphenylurea Class: Structure Activity Relationships," Proc. Amer. Assoc. Can. Res., 42:923, 2001	
		XP-001145481 +2921 Phase I and Pharmacokinetic Study of the Raf Kinase Inhibitor Bay 43-9006 in Patients with Locally Advanced or Metastatic Cancer," Proceedings of the Annual Meeting of the American Association of Cancer Research, 42:543, 2001, Dirk Strumberg et al., Bayer AG.	
		Garcia-Lopes et al., "New routes for the synthesis of pyrrolo(3,2-d)- and (2,3-d)-pyrimidine systems starting from a common pyrrole derivative," Jour. Chem. Soc., pp. 483-487, 1978	
		Facts and Comparisons, 1994, 2703-2705	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RJT/lvb:Document4

Please type a plus sign (+) inside this box →



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 8

Complete if Known

Application Number	10/042,226
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1614
Examiner Name	Dwayne C. Jones
Attorney Docket Number	BAYER-0024-A

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		XP-002233466, MEDLINE/NLM, NLM8336809 - [Intra-arterial ACNU, CDDP chemotherapy for brain metastases from lung cancer: comparison of cases with and without intra-arterial mannitol infusion], Iwade Y et al.	
		XP-002086152 Hanson, "Pulmonary-Allergy, Dermatological, Gastrointestinal & Arthritis, Inhibitors of p38 kinase," <i>Exp. Opin. Ther. Patents</i> , (1997) 7(7):729-733	
		T. Murata et al., "Facile synthesis of new pyrrolo[3,4-d]pyrimidine-2,4-diones", <i>Chemical and Pharmaceutical Bulletin</i> , Vol. 22, 1974, pp. 1212-13 (XP-000973679)	
		Wilson, Keith et al., "The structural basis for the specificity of pyrimidinylimidazole inhibitors of p38 MAP Kinase" XP-002103155	
		Lowinger, T. B.; Riedl, B.; Wood, J.; Dumas, J.; Smith, R. A.; Khire, U.; Bankston, D.; Monahan, M.K.; Scott, W. J.; Lee, W.; Johnson, J. S.; Caringal, Y.; Turner, T.; Gane, T.; Kennure, N.; Barbosa, J. "Discovery of a Novel Class of Potent Raf Kinase inhibitors: Structure Activity Relationships" <i>Clin. Cancer Res.</i> 2000, 6(suppl.) 335.	
		Redman, A. M.; Johnson, J. S.; Dally, R.; Swartz, S.; Wild, H.; Paulsen, H.; Caringal, Y.; Gunn, D.; Renick, J.; Osterhout, M.; Kingery-Wood, J.; Smith, R. A.; Lee, W.; Dumas, J.; Wilhelm, S. M.; Housley, T. J.; Bhargava, A.; Ranges, G. E.; Shrikhande, A.; Young, D.; Bombara, M.; Scott W. J. "P38 Kinase Inhibitors for the Treatment of Arthritis and Osteoporosis: Thienyl, Furyl and Pyrrolyl Ureas" <i>Bioorg. Med. Chem. Lett.</i> 2001, 11 (1), 9.	
		Dumas, J.; Hatoum-Mokdad, H.; Sibley, R. N.; Smith, R. A.; Scott, W. J.; Khire, U.; Lee, W.; Wood, J.; Wolanin, D.; Cooley, J.; Bankston, D.; Redman, A. M.; Schoenleber, R.; Caringal, Y.; Gunn, D.; Romero, R.; Osterhout, M.; Paulsen, H.; Housley, T. J.; Wilhelm, S. M.; Bhargava, A.; Pirro, J.; Chien, D.-S.; Ranges, G. E.; Shrikhande, A.; Muzsi, A.; Bortolon, E.; Wakefield, J.; Gianpaolo-Ostravage, C.; Chau, T. "Synthesis and Pharmacological Characterization of a Potent, Orally Active p38 Kinase Inhibitor" <i>Bioorg. Med. Chem. Lett.</i> 2002, 12, 1559.	

Examiner Signature	Date Considered
-----------------------	--------------------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RJT/vb:Document4

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 8

Complete if Known

Application Number	10/042,226
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1614
Examiner Name	Dwayne C. Jones
Attorney Docket Number	BAYER-0024-A

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Lowinger, T. B.; Riedl, B.; Dumas, J.; Smith, R. A. "Design and Discovery of Small Molecules Targeting Raf-1 Kinase" Curr. Pharm. Design 2002, 8 (25), 2269.	
		Bankston, D.; Dumas, J.; Natero, R.; Riedl, B.; Monahan, M.-K.; Sibley, R. "A Scaleable Synthesis of BAY 43-9006: A Potent Raf Kinase Inhibitor for the Treatment of Cancer" Org. Proc. Res. Dev. 2002, 6(6), 777-781.	
		Khire, U.; Bankston, D.; Barbosa, J.; Brittelli, D.; Caringal, Y.; Carlson, R.; Dumas, J.; Gane, T.; Heald, S.; Hibner, B.; Johnson, J. S.; Katz, M. E.; Kennure, N.; Kingery-Wood, J.; Lee, W.; Liu, X.-G.; Lowinger, T. B.; Renick, J.; McAlexander, I.; Monahan, M.-K.; Natero, R.; Riedl, B.; Rong, H.; Sibley, R. N.; Smith, R. A.; Wolanin, D.: "Omega-Carboxypyridyl Substituted Ureas as Raf Kinase Inhibitors: SAR of the Amide Substituent" Bioorg. Med. Chem. Lett. 2004, 14, 783-786.	
		Dumas, J.; Smith, R. A.; Lowinger, T. B.: "Recent Developments in the Discovery of Protein Kinase Inhibitors from the Urea Class" Curr. Opin. Drug Discov. Dev. 2004, 7(5), 600-616.	
		Wan PTC, Garnett MJ, Roe SM, Lee S, Niculescu-Duvaz D, Good VM, Cancer genome project, Jones CM, Marshall CJ, Springer CJ, Barford D, Marais R: Mechanism of activation of the RAF-ERK signaling pathway by oncogenic mutations of B-RAF. Cell 2004, 116, 855-867.	
		Mross K, Steinbild S, Baas F, Reil M, Buss P, Mersmann S, Voliotis D, Schwartz B, Brendel E: "Drug-drug interaction pharmacokinetic study with the Raf kinase inhibitor (RKI) BAY 43-9006 administered in combination with irinotecan (CPT-11) in patients with solid tumors" Int. J. Clin. Pharm. Ther. 2003, 41(12), 618-619.	
		Siu LL, Awada A, Takimoto CH, Moore MJ, Piccart M, Fiander W, Lathia C, Petrensiuc O: "Phase I study of oral Raf-1 kinase inhibitor BAY 43-9006 in combination with gemcitabine in patients with advanced solid tumors" 39th ASCO meeting, Chicago, IL (2003) Abstract 828.	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RJT/lvb:Document4

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)



Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/042,226
		Filing Date	January 11, 2002
		First Named Inventor	Bernd RIEDL et al.
		Group Art Unit	1614
		Examiner Name	Dwayne C. Jones
Sheet 5 of 8	Attorney Docket Number	BAYER-0024-A	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Richly H, Kupsch P, Passage K, Grugert M, Hilger RA, Kredke S, Voliotis D, Scheulen ME, Seeber S, Strumberg D: "A Phase I clinical and pharmacokinetic study of the Raf kinase inhibitor (RKI) BAY 43-9006 administered in combination with doxorubicin in patients with solid tumors" Int. J. Clin. Pharm. Ther. 2003, 41(12), 620-621.	
		Sorbera LA, Castaner J, Bozzo J, Leeson PA: "Oncolytic Raf kinase inhibitor" Drugs Future 2002, 27, 1141-1147.	
		Bollag G, Freeman S, Lyons JF, Post LE: "Raf pathway inhibitors in oncology" Curr. Opin. Invest. Drugs 2003, 4(12), 1436-1441.	
		Lee JT, McCubrey JA: BAY-43-9006 (Bayer/Onyx). Curr Opin Invest Drugs (2003) 4(6):757-763.	
		DeGrendele H: "Activity of the Raf kinase inhibitor BAY 43-9006 in patients with advanced solid tumors" Clin. Colorectal Cancer 2003, 3(1), 16-18.	
		Wilhelm, S. M.; Carter, C.; Tang, L. Y.; Wilkie, D.; McNabola, A.; Rong, H.; Chen, C.; Zhang, X.; Vincent, P.; McHugh, M.; Cao, Y.; Shujath, J.; Gawlak, S.; Eveleigh, D.; Rowley, B.; Liu, L.; Adnane, L.; Lynch, M.; Auclair, D.; Taylor, I.; Gedrich, R.; Voznesensky, A.; Riedl, B.; Post, L. E.; Bollag, G.; Trail, P.A. "BAY 43-9006 exhibits broad spectrum oral antitumor activity and targets the RAF/MEK/ERK pathway and receptor tyrosine kinases involved in tumor progression and angiogenesis" Cancer Res. 2004, 64(19), 7099-7109.	
		Dumas, J.; Sibley, R.; Riedl, B.; Monahan, M.-K.; Lee, W.; Lowinger, T. B.; Redman, A. M.; Johnson, J. S.; Kingery-Wood, J.; Scott, W. J.; Smith, R. A.; Bobko, M.; Schoenleber, R.; Ranges, G. E.; Housley, T. J.; Bhargava, A.; Wilhelm, S. M.; Shrikhande, A. "Discovery of a New Class of p38 Kinase Inhibitors" Bioorg. Med. Chem. Lett. 2000, 10 (18), 2047.	
		Proceedings of the American Association for Cancer Research - Volume 42 - March 2001 - #4957 A Novel Diphenylurea Raf-1 Kinase Inhibitor (RKI) Blocks the Raf/Mek/Erk Pathway in Tumor Cells. Scott McClelland Wilhelm et al., Bayer Corporation.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 6 of 8

Complete if Known

Application Number	10/042,226
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1614
Examiner Name	Dwayne C. Jones
Attorney Docket Number	BAYER-0024-A

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Nickel et al., "Carboxylic acid analogues of suramin, potential filaricides," <i>Indian Journal of Chemistry</i> , Vol. 30B, February 1991, p. 182-187	
		Campbell et al., "Increasing complexity of Ras signaling," <i>Oncogene</i> , (1998) 17, 1395-1413	
		Moelling et al., "Signal transduction as target of gene therapy," Institute of Medical Virology, University of Zürich, <i>Recent Results in Cancer Research</i> , Vol. 142, pp. 63-71	
		Jay H. Stein, Internal Medicine, 4th Edition, 1994, pp. 699-715	
		Kempter et al., "Synthese potentieller Pflanzenschutz- und Schädlingsbekämpfungsmittel aus substituierten Anilinen," Pädagogische Hochschule, Eingegangen am 1.7.1982, 101-120	
		Lyons et al., "Discovery of a novel Raf kinase inhibitor," <i>Endocrine-Related Cancer</i> , (2001) 8, 219-225	
		Smith, et al., "Discovery of heterocyclic ureas as a new class of raf kinase inhibitors: identification of a second generation lead by a combinatorial chemistry approach." <i>Bioorganic & Medicinal Chemistry Letters</i> , 11 (2001) 2775-2778	
		Adjei et al., "A phase I study of BAY 43-9006 and gefitinib in patients with refractory or recurrent non-small-cell lung cancer (NSCLC)," Meeting: 2005 ASCO Annual Meeting, Category: Developmental Therapeutics: Molecular Therapeutics, Subcategory: Antiangiogenic or Antimetastatic agents, Abstract No. 4510	
		Eisenhauer et al., "Impact of new non-cytotoxics in the treatment in ovarian cancer," <i>Int. J. Gynecol Cancer</i> , 2001, 11 (Suppl. 1), 68-72	
		Strumberg et al., "Results of phase I pharmacokinetic and pharmacodynamic studies of the raf kinase inhibitor BAY 43-9006 in patients with solid tumors," <i>International Journal of Clinical Pharmacology and Therapeutics</i> , Vol. 40, No. 12/2002 (580-581)	
		Chang et al., "BAY 43-9006 (Sorafenib) inhibitors ectopic (s.c.) and orthotopic growth of a murine model of renal adenocarcinoma (Renca) predominantly through inhibition of tumor angiogenesis," 96th Annual Meeting, April 16-20, 2005, Anaheim/Orange County, CA	
		Panka et al., "BAY 43-9006 induces apoptosis in melanoma cell lines," 96th Annual Meeting, April 16-20, 2005, Anaheim/Orange County, CA	

Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 7 of 8

Complete if Known

Application Number	10/042,226
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1614
Examiner Name	Dwayne C. Jones
Attorney Docket Number	BAYER-0024-A

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Auclair, et al., "BAY 43-9006 (Sorafenib) is a potent inhibitor of FLT3 tyrosine kinase signaling and proliferation in AML cells," 96 th Annual Meeting, April 16-20, 2005, Anaheim/Orange County, CA	
		Murphy et al., "BAY 43-9006 controls tumor growth through inhibition of vascular development," 96 th Annual Meeting, April 16-20, 2005, Anaheim/Orange County, CA	
		Spronsen et al., "Novel treatment strategies in clear-cell metastatic renal cell carcinoma," <i>Anti-Cancer Drugs</i> , 2005, 16:709-717	
		Thaimattam et al., "3D-QSAR CoMFA, CoMSIA studies on substituted ureas as Raf-1 kinase inhibitors and its confirmation with structure-based studies," <i>Bioorganic & Medicinal Chemistry</i> , 12(2004) 6415-6425	
		Danson et al., "Improving outcomes in advanced malignant melanoma," <i>Drugs</i> , 2005, 65(6):733-743	
		Heim et al., "Antitumor effect and potentiation or reduction in cytotoxic drug activity in human colon carcinoma cells by the Raf kinase inhibitor (RKI) BAY 43-9006," <i>International Journal of Clinical Pharmacology and Therapeutics</i> , Vol. 41, No. 12/2003 (616-617)	
		Richly et al., "Results of a phase I trial of BAY 43-9006 in combination with doxorubicin in patients with primary hepatic cancer," <i>International Journal of Clinical Pharmacology and Therapeutics</i> , Vol. 42, No. 11/204 (650-651)	
		Hubbard, "Oncogenic mutations in B-Raf: some losses yield gains," Skirball Institute of Biomolecular Medicine and Department of Pharmacology, New York University School of Medicine, New York, NY	
		Thompson et al., "Recent progress in targeting the Raf/MEK/ERK pathway with inhibitors in cancer drug discovery," <i>Curr. Opin. Pharmacol.</i> , 2005 Aug., 5(4):350-6	
		Moore et al., "Phase I study to determine the safety and pharmacokinetics of the novel Raf kinase and VEGFR inhibitor BAY 43-9006, administered for 28 days on/7 days off in patients with advanced, refractory solid tumors," <i>Annals of Oncology</i> , 16:1688-1694, 2005	
		Ahmad et al., "Kinase inhibition with BAY 43-9006 in renal cell carcinoma," <i>Clinical Cancer Research</i> , Vol. 10, 6388s-6392s, 15 Sept. 2004	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 8 of 8

Complete if Known

Application Number	10/042,226
Filing Date	January 11, 2002
First Named Inventor	Bernd RIEDL et al.
Group Art Unit	1614
Examiner Name	Dwayne C. Jones
Attorney Docket Number	BAYER-0024-A

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Clark et al., "Safety and pharmacokinetics of the dual action raf kinase and vascular endothelial growth factor receptor inhibitor, BAY 43-9006, in patients with advanced, refractory solid tumors," <i>Clin. Cancer Res.</i> , 2005:11(15), 1 August 2005, 5472-5480	
		Wilhelm et al., "BAY 43-9006: preclinical data," <i>Curr Pharm Des</i> , 2002, 8(25):2255-7	
		Wright et al., "Clinical trials referral resource. Current clinical trials of BAY 43-9006, Part 1," <i>Oncology</i> , 2005 Apr, 19(4):499-502	
		Patent Abstracts of Japan, Publication No. 02-023337, published 01-28-1990	
		Patent Abstracts of Japan, Publication No. 02-022650, published 01-25-1990	
		Wissner et al., "Analogues of platelet activating factor. 7. Bis-aryl amide and bis-aryl urea receptor antagonists of PAF," <i>J. Med. Chem.</i> , 1992, 35, 4779-4789	
		Ravi et al., "Activated raf-1 causes growth arrest in human small cell lung cancer cells," <i>J. Clin. Invest.</i> , pp. 153-159	
		Lemoine, "Overview of ras oncogenes and their clinical potential," Chapter 10,	
		Escudier et al., "Randomized phase III trial of the raf kinase and VEGFR inhibitor sorafenib (BAY 43-9006) in patients with advanced renal cell carcinoma (RCC)," Meeting: 2005 ASCO Annual Meeting, Category: Genitourinary Cancer, Subcategory: Kidney Cancer, Abstract No. 4510	
		Eisen et al., "Phase I trial of BAY 43-9006 (sorafenib) combined with dacarbazine (DTIC) in metastatic melanoma patients," Meeting: 2005 ASCO Annual Meeting, Category: Melanoma, Subcategory: Melanoma, Abstract No. 7508	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.